

1) Given:  $\angle 3 \cong \angle 5$   
 $\angle 3 \cong \angle 7$

Name \_\_\_\_\_ Per. \_\_\_\_\_

What can you conclude? \_\_\_\_\_ Why? \_\_\_\_\_

2) Given:  $\angle 1 \cong \angle 4$   
 $\angle 4 \cong \angle 8$

What can you conclude? \_\_\_\_\_ Why? \_\_\_\_\_

3) Given:  $m\angle 1 + m\angle 2 = 180$   
 $m\angle 3 + m\angle 4 = 180$

What can you conclude? \_\_\_\_\_

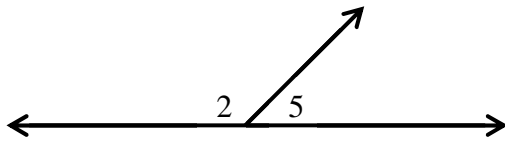
Why? \_\_\_\_\_

4) Given:  $\angle 2$  and  $\angle 5$  are supplementary

What can you conclude? \_\_\_\_\_

Why? \_\_\_\_\_

5) Given:



What can you conclude? \_\_\_\_\_

Why? \_\_\_\_\_

6) Given:  $m\angle 5 = m\angle 6$   
 $m\angle 9 = m\angle 2$

Therefore?  $m\angle 5 + m\angle 9 = m\angle 6 + m\angle 2$

Why? \_\_\_\_\_

# 7 - 8  $\overline{CD}$  bisects  $\angle XCY$

7) Therefore?  $m\angle XCD = m\angle DCY$

Why? \_\_\_\_\_

8) Therefore?  $m\angle DCY = \frac{1}{2}m\angle XCY$

Why? \_\_\_\_\_